Algebra/Data Analysis Toolkit: Indicator 1.1.4

Student Handout: Algebra/Data Analysis: Indicator 1.1.4

Goal 1.0 Functions and Algebra

Expectation 1.1 The student will analyze a wide variety of patterns and functional relationships using the language of mathematics and appropriate technology.

Indicator 1.1.4 The student will describe the graph of a non-linear function and discuss its appearance in terms of the basic concepts of maxima and minima, zeros (roots), rate of change, domain and range, and continuity.

Assessment Limits:

A coordinate graph will be given with easily read coordinates.

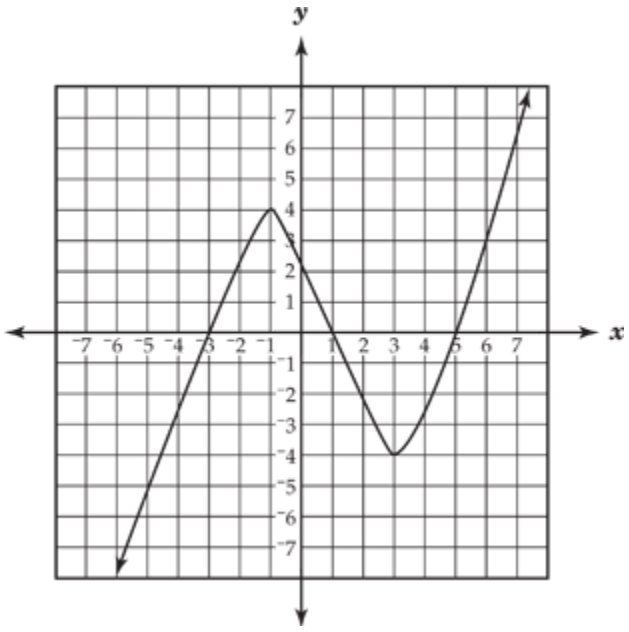
"Zeros" refers to the x-intercepts of a graph, "roots" refers to the solution of an equation in the form p(x) = 0.

Problems will not involve a real-world context.

Public Release - Selected Response Item - Released in 2009

Algebra/Data Analysis Indicator 1.1.4

Look at the function that is graphed below.



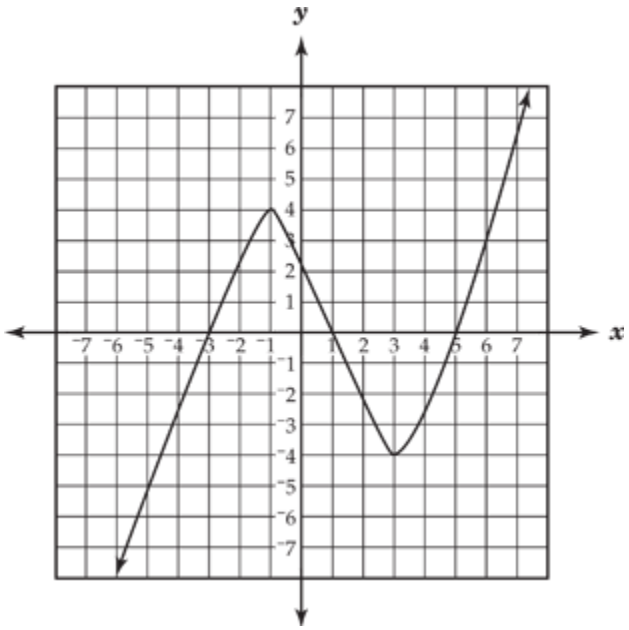
What are the zero(s) of the function?

A. 2
B. −1, 3
C. −4, 4
D. −3, 1, 5

Correct Answer
D. −3, 1, 5

Item

Look at the function that is graphed below.



What are the zero(s) of the function?

A. 2
B. −1, 3
C. −4, 4
D. −3, 1, 5